D INTELLECTUAL PROPERTY ORGANIZATION



International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6:

C12N 15/29, 15/82, A01H 5/00

(11) International Publication Number:

WO 99/05281

A1

(43) International Publication Date:

4 February 1999 (04.02.99)

(21) International Application Number:

PCT/AU98/00587

(22) International Filing Date:

24 July 1998 (24.07.98)

(30) Priority Data:

PO 8233 PP 1184

25 July 1997 (25.07.97)

AU 31 December 1997 (31.12.97) AU

(71) Applicant (for all designated States except US): THE UNI-VERSITY OF MELBOURNE [AU/AU]; Grattan Street, Parkville, VIC 3052 (AU).

(72) Inventors; and

(75) Inventors/Applicants (for US only): SINGH, Mohan [AU/AU]; 7 Lloyd Court, Templestowe, VIC 3106 (AU). BHALLA, Prem [AU/AU]; 7 Lloyd Court, Templestowe, VIC 3106 (AU). XU, Hui-Ling [AU/AU]; 19 Roseland Grove, Doncaster, VIC 3108 (AU). SWOBODA, Ines [AT/AU]; 2/234 Cardigan Street, Carlton, VIC 3053 (AU).

(74) Agents: HUGHES, E., John, L. et al.; Davies Collison Cave, 1 Little Collins Street, Melbourne, VIC 3000 (AU).

(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published

With international search report.

(54) Title: NOVEL NUCLEIC ACID MOLECULES AND USES THEREFOR

(57) Abstract

The present invention relates generally to a novel nucleic acid molecule. More particularly, the present invention relates to a male germ line cell specific genetic sequence in plants. Male germ line cells include generative cells and sperm cells. Even more particularly, the present invention provides a male germ line specific gene or functional equivalent thereof and to the promoter of said gene or its functional derivatives and their use in generating a range of mutant plants including male sterile plants and transposon tagged plants.